

CLAIMS:

1. A method for streaming scalable coded video over a network, the method comprising:
 - 5 a) encoding a first bit-stream representing a base layer of said scalable coded video;
 - b) encoding a second bit-stream representing an enhancement layer of said scalable coded video;
 - c) generating a first hint track to facilitate the transmission of said encoded first bit-stream (base layer) over said network; and
 - 10 d) generating a plurality of enhancement layer hint tracks to facilitate the transmission of at least a portion of said second bit-stream (enhancement layer) over said network.
2. The method of Claim 1, further comprising the steps of:
 - e) transmitting said encoded first bit-stream (base layer) over said network in accordance with data elements contained within said first hint track;
 - 20 f) determining said at least a portion of said encoded second bit-stream (enhancement layer) to be transmitted over said network; and
 - g) transmitting said determined portion of said encoded second bit-stream (enhancement layer) over said network in accordance with data elements contained within one or more enhancement layer hint tracks from among said plurality of enhancement layer hint tracks.
- 30 3. The method of Claim 2, wherein said step (f) of determining a portion of said encoded second bit-stream to

be transmitted is made in accordance with at least one of a prevailing network condition, a network bandwidth variation, a network complexity constraint and a user preference.

5 4. The method of Claim 2, wherein said step (g) of transmitting said determined portion of said encoded second bit-stream further comprises the steps of:

1) identifying those enhancement layer hint tracks from among said plurality of enhancement layer hint tracks
10 required to satisfy said determined portion to be transmitted; and

2) establishing a separate end-to-end network connection for each of said identified enhancement layer hint tracks.

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5. The method of Claim 4, wherein said established end-to-end network connection is an RTP connection.

6. The method of Claim 1, wherein said step (d) of d)
20 generating a plurality of enhancement layer hint tracks to facilitate the transmission of at least a portion of said second bit-stream (enhancement layer) over said network further comprises maintaining said enhancement layer for local playback.

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7. A system for streaming scalable coded video over a network, the system comprising:

means for encoding a first bit-stream representing
30 a base layer of said scalable coded video;

means for encoding a second bit-stream representing an enhancement layer of said scalable coded video;

5 means for generating a first hint track to facilitate the transmission of said encoded first bit-stream (base layer) over said network; and

means for generating a plurality of enhancement layer hint tracks to facilitate the transmission of at least a portion of said second bit-stream (enhancement layer) over
10 said network.

8. The system of Claim 1, further comprising:

means for transmitting said encoded first bit-stream (base layer) over said network in accordance with
15 data elements contained within said first hint track;

means for determining said at least a portion of said encoded second bit-stream to be transmitted over said network; and

20 means for transmitting said at least a portion of said encoded second bit-stream (enhancement layer) over said network in accordance with data elements contained within one or more enhancement layer hint tracks from among said plurality of enhancement layer hint tracks.

25 9. The system of Claim 8, wherein said means for determining said at least a portion of said encoded second bit-stream to be transmitted is made in accordance with at least one of a prevailing network condition, a network bandwidth variation, a network complexity constraint and a
30 user preference.

10. The system of Claim 8, wherein said means for transmitting said determined portion of said encoded second bit-stream further comprises:

5 means for identifying those enhancement layer hint tracks from among said plurality of enhancement layer hint tracks required to satisfy said at least a portion of said encoded second bit-stream to be transmitted; and

means for establishing a separate end-to-end network connection for each of said identified enhancement
10 layer hint tracks from among said plurality of enhancement layer hint tracks.

11. The system of Claim 10, wherein said established end-to-end network connections are RTP connections.

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12. The system of Claim 7, further comprising means for maintaining said enhancement layer to be utilized for local playback.

20 13. The system of Claim 7, wherein said encoder is an MPEG-4 encoder.